

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/643,078 08/19/2003		08/19/2003	Isao Nakazawa	122.1563	3056
21171	7590	12/06/2006		EXAMINER	
STAAS & HALSEY LLP				NGUYEN, DAVID Q	
SUITE 700 1201 NEW	YORK AV	/ENUE, N.W.	ART UNIT	PAPER NUMBER	
WASHING		•	2617		

DATE MAILED: 12/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Supplemental Notice of Allowability	10/643,078 NAKAZAWA ET AL.		
	Examiner  David Q. Nguyen	Art Unit	
		2617	
The MAILING DATE of this communication of claims being allowable, PROSECUTION ON THE MER erewith (or previously mailed), a Notice of Allowance (PTOTICE OF ALLOWABILITY IS NOT A GRANT OF PATOTHE of the Office or upon petition by the applicant. See 37 CF	RITS IS (OR REMAINS) CLOSED ir OL-85) or other appropriate commu ENT RIGHTS. This application is s	this application. If not included inication will be mailed in due course.	'HIS nitiative

	David Q. Nguyen	2617	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS ( herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	blication. If not include will be mailed in due	ed course THIS
1. X This communication is responsive to <u>08/31/06</u> .			
2. $\boxtimes$ The allowed claim(s) is/are <u>1-5</u> .			
<ol> <li>Acknowledgment is made of a claim for foreign priority un</li> <li>a)</li></ol>	der 35 U.S.C. § 119(a)-(d) or (f).		
<ol> <li>Certified copies of the priority documents have</li> </ol>	been received.	•	
2. Certified copies of the priority documents have	been received in Application No		
3.  Copies of the certified copies of the priority doc			ion from the
International Bureau (PCT Rule 17.2(a)).	·	3 11	
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONMI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	of this communication to file a reply of ENT of this application.	complying with the req	uirements
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>	tted. Note the attached EXAMINER' s reason(s) why the oath or declarat	S AMENDMENT or Notion is deficient.	OTICE OF
5. $\prod$ CORRECTED DRAWINGS ( as "replacement sheets") must	t be submitted.		
(a) ☐ including changes required by the Notice of Draftsperso	on's Patent Drawing Review ( PTO-9	948) attached	
1)  hereto or 2)  to Paper No./Mail Date			
(b) including changes required by the attached Examiner's Paper No./Mail Date	Amendment / Comment or in the O	ffice action of	
Identifying indicia such as the application number (see 37 CFR 1.6 each sheet. Replacement sheet(s) should be labeled as such in the	84(c)) should be written on the drawing the header according to 37 CFR 1.121(c	gs in the front (not the	back) of
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT F</li> </ol>	SIT OF BIOLOGICAL MATERIAL METERIAL MET	nust be submitted. N NL MATERIAL.	ote the
	•		
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)	E D Notice of Informal D	-A	
•	5. Notice of Informal Pa	• •	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary ( Paper No./Mail Date		
<ol> <li>Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date</li> </ol>	7. Examiner's Amendm	ent/Comment	
<ol> <li>Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol>	8. X Examiner's Statement	nt of Reasons for Allov	wance
-	9.  Other		

Application/Control Number: 10/643,078 Page 2

Art Unit: 2617

## **DETAILED ACTION**

## Allowable Subject Matter

1. Claims 1-5 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding independent claim 1, Seppinen (6,646,449); Popovic (6,292,519); He (6,885,694); and Jiang (US 2005/0032472 A1) all disclose a line characteristic evaluation system comprising a line quality estimating means estimating a line quality of the wireless communication line. The above prior art of record, however, fail to disclose estimating the line quality of the wireless communication line is based on a reception equivalent band limitation expressed by attenuation of the intercept point input level (JIP), reception side thermal noise of the wireless communication lines, and said leakage power from other interfering wireless lines leaking into the reception equivalent band as specified in the claim.

Claims 2-5 depend on claim 1. Therefore, they are allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Q. Nguyen whose telephone number is 571-272-7844. The examiner can normally be reached on 8:30AM-5:30PM.

Application/Control Number: 10/643,078

Art Unit: 2617

Page 3

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOSEPH H. FEILD can be reached on (571)272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Q Nguyen Examiner Art Unit 2617

JOSÉPH FEILD SUPERVISORY PATENT EXAMINER